Amendments to the Claims

Claims

1.(currently amended) A stream computer, said stream computer comprising:

a plurality of interconnected functional units, each of said functional units responsive to a data stream containing data to be operated on by one or more of said functional units;

digital logic cooperatively associated with one of said functional units for adding one or more tokens to said data stream presented to said one of said functional units, said one or more tokens [[representative of]] used to describe [[the]] a type of data being generated by said one or more functional units[[.]],

said digital logic reporting said one or more tokens at one of said functional units to a graphical programming environment,

said graphical programming environment compatible with human perception.

2.(currently amended) A stream computer as described in claim 1 wherein said data and one or more tokens form said data stream, said digital logic reporting the occurrence of said one or more tokens within said data stream [[.]] to said graphical programming environment.

3.(currently amended) A stream computer as described in claim 2 wherein said digital logic reports said occurrence of tokens to said graphical programming environment without interrupting said data stream.

4. (currently amended) A stream computer as described in claim 2 wherein said digital logic reports one or more tokens arriving at one of said functional units, said one or more tokens within said data stream, said digital logic reporting to [[a]] said graphical programming environment, said one or more tokens present within said data stream, said graphical programming environment compatible with human perception.

5. (previously presented) A stream computer as described in claim 4 wherein said programming environment compares said one or more tokens arriving from said

digital logic with stored values for said one or more tokens.

6.(previously presented) A stream computer as described in claim 5 wherein an error message is generated by said graphical programming environment whenever said comparison between said one or more tokens and said stored values indicates said one or more tokens and said stored values do not match.

7.(previously presented) A stream computer as described in claim 2 wherein said digital logic reports one or more tokens generated by one of said functional units, said one or more tokens incorporated within said data stream, said digital logic reporting to a graphical programming environment, said one or more tokens present within said data stream, said graphical programming environment compatible with human perception.

8.(previously presented) A stream computer as described in claim 7 wherein said programming environment compares said tokens arriving from said digital logic with stored values for said tokens.

9. (previously presented) A stream computer as described in claim 7 wherein an error message is generated whenever said comparison between said tokens and said stored values indicates said tokens and said stored values do not match.

10.(previously presented) A stream computer as described in claim 2 wherein said at least one of said plurality of interconnected functional units, and said digital logic, are integrated on a single substrate.

11. (currently amended) A method for operating a stream computer, said method comprising the steps of:

programming one or more interconnected functional units forming said stream computer to respond to data and one or more tokens, said data and said one or more tokens contained in a data stream ;

programming digital logic cooperatively associated with said one or more functional units for adding a token to said data stream presented to said one of said

functional units, said token [[representative of]] used to describe [[the]] a type of data being generated by said one or more functional units [[.]] ,

said digital logic reporting said one or more tokens at one of said functional units to a graphical programming environment,

said graphical programming environment compatible with human perception.

12.(currently amended) A method for operating a stream computer as described in claim 11 wherein said digital logic reports the occurrence of tokens within said data stream [[.]] to said graphical programming environment.

13.(currently amended) A method for operating a stream computer as described in claim 12 wherein said digital logic reports said occurrence of tokens without interrupting said data stream [[.]] to said graphical programming environment.

14.(currently amended) A method for operating a stream computer as described in claim 12 wherein said digital logic reports one or more tokens arriving at one of said functional units, said one or more tokens within said data stream, said digital logic reporting to [[a]] said graphical programming environment, said graphical programming environment compatible with human perception of said one or more tokens present within said data stream.

15.(previously presented) A method for operating a stream computer as described in claim 14 wherein said programming environment compares said tokens arriving from said digital logic with stored values for said tokens.

16.(previously presented) A method for operating a stream computer as described in claim 15 wherein an error message is generated whenever said comparison between said tokens and said stored values indicates said tokens and said stored values do not match.

17.(previously presented) A method for operating a stream computer as described in claim 12 wherein said digital logic reports one or more tokens generated by one of said functional units, said one or more tokens incorporated within said data

stream, said digital logic reporting to a graphical programming environment, said graphical programming environment compatible with human perception of said one or more tokens present within said data stream.

18.(previously presented) A method for operating a stream computer as described in claim 17 wherein said programming environment compares said tokens arriving from said digital logic with stored values for said tokens.

19.(previously presented) A method for operating a stream computer as described in claim 17 wherein an error message is generated whenever said comparison between said tokens and said stored values indicates said tokens and said stored values do not match.